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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,850	03/29/2004	Pei-Ming Shan	12301-US-PA	2849

31561 7590 09/14/2006

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER	
DESIR, JEAN WICEL	
ART UNIT	**PAPER NUMBER**
2622	

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/708,850	SHAN ET AL.	
	Examiner	Art Unit	
	Jean W. Désir	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-10 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-10 is/are rejected.

7)☒ Claim(s) 1 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art Figs. 1-3 discussed in the background of the instant application in view of Kim et al (US 6,822,691).

Claim 1:

The admitted prior art discloses:

A method of inter-frame Y/C separation (Fig. 3), comprising:

"sampling a composite video signal for temporarily storing a plurality of sampled data $F_mP_{x,y}$, wherein the $F_mP_{x,y}$ represents data of the y pixel at the x line of the m frame, and the m, x and y are integers larger than, or equal to, 0", see Fig. 3 items Composite video signal, Memory (340);

"measuring a plurality of luma data $Y_{x,y}$ by a $F_{m+1}P_{x,y}$, the $F_mP_{x,y}$, a $F_{m-1}P_{x,y}$ and a $F_{m-2}P_{x,y}$, wherein $Y_{x,y}$ represents luma data of the y pixel of the x line", see Fig. 3 items 310, 320, 350;

"and measuring a plurality of chroma data $C_{x,y}$ by the $F_{m+1}P_{x,y}$, the $F_mP_{x,y}$, the $F_{m-1}P_{x,y}$ and the $F_{m-2}P_{x,y}$,, wherein $C_{x,y}$ represents chroma data of the y pixel of the x line", see Fig. 3 items 310, 320, 350;

the difference between the claimed invention and the admitted prior art is that the admitted prior art does not explicitly use the two consecutive frames $F_{m-1}P_{x,y}$ and $F_{m-2}P_{x,y}$. However, the admitted prior art does use two consecutive frames $F_{m+1}P_{x,y}$ and $F_mP_{x,y}$ as pointed out above; and the admitted prior art suggests that more consecutive frames can be used (see paragraphs [0015], [0016]); and it is also notoriously well known in the art to use more consecutive frames (as evidence see Kim at Fig. 3), for instance four consecutive frames, in order to obtain a more precise motion detection. Thus, an artisan would be motivated to modify the admitted prior art and implement more consecutive frames F_{m-1} , F_{m-2} in order to arrive at the claimed invention; the implementation would result in a more precise motion detection that would be useful in Y/C separation and would improve the image quality. Therefore, the claimed invention would have been obvious to a person of ordinary skill in the art at the time the invention was made.

Claim 2 is met by the above implementation, because four consecutive frames are used in the implementation and the admitted prior art teaches addition, subtraction, and/or averaging of values (see paragraphs [0015], [0016])

Claim 3 is met, see Fig. 3.

Claim 4 is met, see [0008] lines 3-4, [0010] lines 3-4.

Claim 5 is rejected for the same reasons as claim 2.

Claim 6 is rejected for the same reasons as claim 3.

Claim 7 is disclosed, see [0008] line 3, [0011] lines 10-13.

Claim 8 is rejected for the same reasons as claim 5.

Claim 9 is rejected for the same reasons as claim 6.

Claim 10 is disclosed, see [0011] lines 10-13.

Claim Objections

3. Claim 1 is objected to because of the following informalities: in claim 1 last line "luma" should be --chroma--. Appropriate correction is required.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 of copending Application No. 10/708,874. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claim 1 is unpatentable over claim 1 of the copending Application:

The claimed "sampling a composite video signal for temporarily storing a plurality of sampled data $F_mP_{x,y}$, wherein the $F_mP_{x,y}$ represents data of the y pixel at the x line of the m frame, and the m, x and y are integers larger than, or equal to, 0" is met by claim 1 of the copending Application lines 3-7;

the claimed "measuring a plurality of luma data $Y_{x,y}$ by a $F_{m+1}P_{x,y}$, the $F_mP_{x,y}$, a $F_{m-1}P_{x,y}$ and a $F_{m-2}P_{x,y}$, wherein $Y_{x,y}$ represents luma data of the y pixel of the x line" is met by claim 1 of the copending Application lines 8-10;

the claimed "and measuring a plurality of chroma data $C_{x,y}$ by the $F_{m+1}P_{x,y}$, the $F_mP_{x,y}$, the $F_{m-1}P_{x,y}$ and the $F_{m-2}P_{x,y}$,, wherein $C_{x,y}$ represents chroma data of the y pixel of the x line" is met by claim 1 of the copending Application lines 11-13.

Claims 2, 3 are met by claim 2 of the copending Application.

Claim 4 is met by claim 3 of the copending Application.

Claims 5, 6 are met by claims 4, 5 of the copending Application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean W. Désir whose telephone number is (571) 272 7344. The examiner can normally be reached on 5/4/9 - First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272 7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD
Sep. 9, 06

DAVID OMETZ
SUPERVISORY PATENT EXAMINER